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FOLLOW-UP STUDY OF GRADUATES OF ELEVEN PUBLIC COMMUNITY COLLEGES IN MARYLAND (CLASSES OF 1959 THROUGH 1963).

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THE DATA IN THIS STUDY WERE COLLECTED FROM ELEVEN COMMUNITY COLLEGES, FROM THE 4-YEAR INSTITUTIONS TO WHICH THEIR GRADUATES TRANSFERRED, AND FROM THE 1744 GRADUATES THEMSELVES, 1296 OF WHOM HAD BEEN ENROLLED IN TRANSFER AND 448 IN OCCUPATIONAL CURRICULA. OF THE OCCUPATIONAL STUDENTS, 19 PERCENT LATER CHANGED GOALS AND CONTINUED AT A 4-YEAR INSTITUTION. TABLES SHOW, AMONG OTHER THINGS, PRESENT AND PROPOSED OCCUPATIONAL CURRICULA, THE NUMBER OF GRADUATES IN OCCUPATIONAL COURSES, HOW MANY STUDENTS CHANGED CURRICULUM AFTER TRANSFER, HOW MANY TRANSFERS RECEIVED THEIR BACHELOR'S DEGREE, THE LENGTH OF TIME THEY TOOK TO DO SO, THE CHANGES IN THEIR GRADE POINT AVERAGES, AND CREDIT HOURS LOST UNDER CERTAIN CONDITIONS. IT IS POINTED OUT THAT JUNIOR COLLEGE GUIDANCE AND COUNSELING STAFFS MUST BEAR IN MIND THE CHARACTERISTICS OF THE HIGH SCHOOLS SUPPLYING THE COLLEGE'S STUDENTS AS WELL AS THE UNIVERSITIES AND 4-YEAR COLLEGES ACCEPTING THEM, IN ORDER TO MINIMIZE THE PENALTIES IN TIME AND MONEY CAUSED BY LOSS OF CREDIT AFTER TRANSFER. A FURTHER FOLLOW-UP STUDY IS CONTEMPLATED ON THE 365 GRADUATES OF THE OCCUPATIONAL PROGRAMS AND THE NATURE OF THEIR EMPLOYMENT AFTER COMPLETING THE 2-YEAR DEGREE COURSE. (HH)

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# FOLLOW-UP STUDY* OF GRADUATES OF ELEVEN PUBLIC COMMUNITY COLLEGES IN MARYLAND (CLASSES OF 1959 THROUGH 1963)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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## A. Introduction

This study is based upon follow-up information provided by the presidents and registrars of the following institutions, whose addresses and dates of establishment are as indicated:

Allegany Community College (1961)
340 North Frederick Street
Cumberland, Maryland 21502

Anne Arundel Community College (1961)
Robinson and Benfield Roads
Severna Park, Maryland 21146

Baltimore Junior College (1947)
2901 Liberty Heights Avenue
Baltimore, Maryland 21215

Catonsville Community College (1957)
800 South Rolling Road
Baltimore, Maryland 21228

Charles County Community College (1958)
Star Route 2
La Plata, Maryland 20646

Essex Community College (1957)
Stemmers Run Road
Baltimore, Maryland 21221

Frederick Community College (1957)
520 North Market Street
Frederick, Maryland 21701

Hagerstown Junior College (1946)
751 Robinwood Drive
Hagerstown, Maryland 21740

Harford Junior College (1957)
401 Thomas Run Road
Bel Air, Maryland 21014

Montgomery Junior College (1946)
Takoma Avenue at Woodbury Drive
Takoma Park, Maryland 20012

Prince George's Community College (1958)
5000 Silver Hill Road
Suitland, Maryland 20028

Thanks and appreciation are due not only to the presidents, the registrars, and the admissions officers and guidance counselors of the above colleges, but also to the corresponding officials of the four-year colleges and universities to which the community college graduates transferred; and to the graduates themselves who faithfully replied to questionnaires, particularly those graduates who completed occupational curricula and returned information regarding the positions they accepted immediately following receipt of their degrees from the community colleges.

* Prepared by Dr. Harold D. Reese, Assistant Director in Certification and Accreditation, Maryland State Department of Education

July 1, 1967

JC 670 986

B. Follow-Up Summary

GRADUATES OF MARYLAND'S PUBLIC COMMUNITY COLLEGES
(Classes of 1959 - 1963)

1. Total Degrees Conferred..... 1744

   No. in Transfer Curricula - 1296 (74%)
   No. in Occupational Curricula - 448 (26%)
   Total - 1744

2. Number of Approved Occupational Curricula (as of April, 1967).... 92

3. Number of Additional Occupational Curricula Proposed..... 75

4. Number of Graduates of Occupational Curricula Who Transferred to Four-Year Colleges and Universities..... 83

5. Percent of Graduates of Occupational Curricula Who Transferred to Four-Year Colleges and Universities..... 19

6. Percent of Graduates Who Changed Curricula Upon Enrollment in Four-Year Colleges and Universities..... 37

7. Percent of Graduates of Transfer Curricula Who Entered Junior Year in Four-Year Colleges and Universities..... 72

8. Number and Percent of Graduates in Transfer Curricula Continuing in Four-Year Colleges and Universities Who Were Awarded Baccalaureate Degrees..... 567 (61%)

   (a) Number and percent of Bachelors Degrees earned within two years after graduation from community college..... 349 (62%)

   (b) Number and percent in three years..... 159 (28%)

   (c) Number and percent in more than three years..... 59 (10%)

9. Average Change in Quality Point Averages After One Semester at the Four-Year Institutions (330 cases).....-0.27

10. Average Change in Quality Point Averages Between Associate and Bachelors Degrees for Corresponding Groups of Individuals (553 cases).....+0.01

11. Average Number of Semester Hours of Credit Lost in Transfer (565 cases)..... 2.62

12. Median Number of Semester Hours of Credit Lost in Transfer (565 cases)..... 0

C. Number of Graduates of Maryland Public Community Colleges

Table 1

NUMBER OF GRADUATES OF PUBLIC COMMUNITY COLLEGES IN MARYLAND
(1959 - 1963)

| College | 1959 | 1960 | 1961 | 1962 | 1963 | Total |
|---|---|---|---|---|---|---|
| Allegany Community College | | | | | 4 | 4 |
| Anne Arundel Community College | | | | | 12 | 12 |
| Baltimore Junior College | 89 | 87 | 122 | 120 | 181 | 599 |
| Catonsville Community College | 1 | 6 | 13 | 16 | 27 | 63 |
| Charles County Community College | | 4 | 16 | 11 | 10 | 41 |
| Essex Community College | 2 | 7 | 16 | 17 | 19 | 61 |
| Frederick Community College | 8 | 8 | 8 | 5 | 16 | 45 |
| Hagerstown Junior College | 25 | 46 | 41 | 52 | 55 | 219 |
| Harford Junior College | 4 | 9 | 7 | 11 | 16 | 47 |
| Montgomery Junior College | 81 | 94 | 115 | 129 | 169 | 588 |
| Prince George's Community College | | 9 | 15 | 26 | 15 | 65 |
| TOTAL | 210 | 270 | 353 | 387 | 524 | 1744 |

The 1744 graduates received Associate in Arts degrees which means that they satisfactorily completed ("C" average or better) approved programs in their respective institutions. Allegany and Anne Arundel Community Colleges admitted their first students in 1961.

D. Graduates in Occupational Curricula

Occupational curricula include those programs which are designed for direct entry into business, industry, etc., after satisfactory completion of the programs. Many of these students, however, decide to transfer to four-year colleges and universities after receiving their Associate degrees.

Table 2

NUMBER OF GRADUATES IN OCCUPATIONAL CURRICULA AND
PERCENTAGE OF TOTAL GRADUATES BY COLLEGE AND BY YEAR

| College | 1959 | | 1960 | | 1961 | | 1962 | | 1963 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. in Occ. | % in Occ. | No. in Occ. | % in Occ. | No. in Occ. | % in Occ. | No. in Occ. | % in Occ. | No. in Occ. | % in Occ. | No. in Occ. | % of Tot Graduate |
| Allegany Community College | | | | | | | | | 0 | | 0 | |
| Anne Arundel Community College | | | | | | | | | 0 | | 0 | |
| Baltimore Junior College | 44 | 49 | 37 | 43 | 53 | 43 | 48 | 40 | 47 | 26 | 229 | 38 |
| Catonsville Community College | 0 | | 0 | | 1 | 8 | 1 | 6 | 0 | | 2 | 3 |
| Charles County Community College | | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Essex Community College | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Frederick Community College | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Hagerstown Junior College | 2 | 8 | 1 | 2 | 3 | 7 | 3 | 6 | 3 | 5 | 12 | 5 |
| Harford Junior College | 0 | | 0 | | 0 | | 1 | 9 | 2 | 13 | 3 | 6 |
| Montgomery Junior College | 38 | 47 | 33 | 35 | 39 | 34 | 40 | 31 | 52 | 31 | 202 | 35 |
| Prince George's Community College | | | 0 | | 0 | | 0 | | 0 | | 0 | |
| TOTAL | 84 | 40 | 71 | 26 | 96 | 27 | 93 | 24 | 104 | 20 | 448 | 26 |

Table 2 reveals that only 26 percent of the 1744 graduates received their Associate degrees in occupational curricula, and that this percentage was concentrated primarily in only two of the eleven colleges--Montgomery Junior College and Baltimore Junior College, both of which had their beginnings in the post-World War II period when the bulge of Veteran enrollments hit the college campuses. These two colleges offered full-time day programs, the Montgomery Junior College occupying the facilities of the former Bliss Electrical School.

Table 3, which follows, presents a list of the occupational curricula in these two colleges and the number of graduates in each program over the five year span. The reader is cautioned at this point to note that the table lists graduates and not enrollments. As in all other college programs, the initial enrollments would be affected by the usual attrition rate characteristic of the first two years of any other college. It should be noted also that occupational curricula are not necessarily to be considered as less rigorous or less demanding than transfer curricula.

Table 3

NUMBER OF GRADUATES IN OCCUPATIONAL CURRICULA FROM
BALTIMORE JUNIOR COLLEGE AND MONTGOMERY JUNIOR COLLEGE (1959 - 1963)

| Baltimore Junior College | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|---|---|---|---|---|
| Secretarial | 7 | 7 | 10 | 10 | 8 |
| Electrical Tech. | 8 | 4 | 3 | 4 | 3 |
| Medical Tech. | 3 | 7 | 4 | 5 | 6 |
| Nursing | 21 | 14 | 25 | 20 | 15 |
| Jr. Construction Engineer | 2 | 3 | 9 | 1 | 0 |
| Retail Merchandising | 3 | 1 | 1 | 0 | 1 |
| Electronics | 0 | 1 | 0 | 0 | 1 |
| Public Health & Sanitation | | | | 2 | |
| Construction Technology | | | | 2 | 6 |
| Business (Accounting) | | | | 3 | 4 |

Table 3 (continued)

| Montgomery Junior College | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|---|---|---|---|---|
| Secretarial | 12 | 10 | 10 | 12 | 18 |
| Business | 5 | 5 | 6 | 3 | 8 |
| Electrical Technical | 18 | 15 | 15 | 14 | 8 |
| Medical Technical | 2 | 0 | 4 | 2 | 4 |
| Engineering Aide | 1 | 2 | 2 | 1 | 0 |
| Selling & Merchandising | | 1 | 1 | | |
| Radiation Technician | | | | 1 | |
| Dental Assisting | | | | 7 | 13 |

E. Why So Few Occupational Programs?

Criticism has come recently from several quarters about the slowness with which the public community colleges have introduced occupational curricula. That occupational curricula have been introduced at a slow pace in Maryland's community colleges is not to be denied, yet it would be totally incorrect to assert that this slow development has been deliberate. A number of factors has contributed to this apparent lag, among them:

a. A lack of complete understanding of the community college by the public

b. A mistaken notion by the public that "college" connotes the traditional four years leading to a baccalaureate degree

c. Occupational curricula are generally more costly to operate than the traditional arts and sciences curricula

d. Seven of the eight community colleges which opened since 1957 started as evening colleges using facilities of public high schools

F. Why Did Most of the Public Community Colleges Start as Evening Programs in Public High Schools?

In the middle 1950's there was no dearth of college facilities across the nation. High school graduates were experiencing little difficulty in finding space in college. In addition, three of the State Teachers Colleges offered low-cost junior college programs for residents of the State.

In 1955, however, the Commission to Study the Needs of Higher Education in Maryland, the so called "Pullen Commission," published its official report in which it stated among its recommendations the following:

> "It is evident that immediate consideration should be given: (1) to the establishment of additional community junior colleges in Baltimore County, Montgomery County, and possibly Anne Arundel County, as well as Baltimore City; (2) also to the most appropriate centers for such colleges in southern Maryland, the Eastern Shore, and western Maryland.
>
> For the next few years it would be expedient:
>
> 1. To house these schools in the existing high-school buildings.
>
> 2. To continue the junior-college programs in the several teachers colleges until other provisions can be made.
>
> But these are expedients only. Planning for the provision of adequate facilities and staffs for an expanded system of junior colleges should proceed without delay."

It should be borne in mind that the above recommendation was made by a top-level committee representative of higher education in Maryland. This committee included the following individuals, representing both public and private segments of college education in the State:

Dr. Wilbur Devilbiss, Dean, College of Education, University of Maryland

Dr. Lowell S. Ensor, President, Western Maryland College

Dr. Earle T. Hawkins, President, Towson State Teachers College

Dr. Martin D. Jenkins, President, Morgan State College

Dr. Otto F. Kraushaar, President, Goucher College

Rev. John E. Wise, S.J., Loyola College

P. Stewart Macaulay, Provost, The Johns Hopkins University

Roszel C. Thomsen, Chief Judge, U. S. District Court
(Assisted by Dr. John H. Fischer, Superintendent, Baltimore City Schools)

Dr. Thomas G. Pullen, Jr., State Superintendent of Schools, Chairman of the Commission

G. Why Did The State Department of Education Take the Leadership Role in Establishing Community Colleges?

To keep things in the proper perspective, it must be remembered that the above recommendations of the Pullen Commission were made at a time when there was no specific legislation on the books regarding the establishment of the financial support of junior or community colleges in the State. The nearest thing to legal sanction of this level of public education was State financial aid for operating costs--an item included in the budget of the State Department of Education. The amount of this aid had been gradually increased for the three existing public junior colleges as the cost of operation increased. The principle which was followed involved a three-way equal split among three groups--the students, the local school units, and the State.

It became the responsibility of the State Department of Education to implement the above recommendation of the Pullen Commission. A sense of urgency to take action developed when the State Department of Education and the local school systems considered the tidal wave of war babies which was then flooding the elementary schools generally at the fourth grade level. That same wave, it was determined, would reach the college campuses in 1964! Something had to be done to insure that an opportunity for a college education would be ready for the hordes of children who would commence to graduate from high school beginning in 1964.

The Pullen Commission had a positive recommendation to take care of the impending emergency and that was to establish community colleges in existing high school buildings. This was the course of action which was decided upon

by the staff of the State Department of Education. And, fortunately, the structure of public education in Maryland was just right for fast action. With only 24 local school systems and many excellent consolidated high schools the State Department of Education did not have the problem of trying to get six or eight separate school districts to agree upon a joint district board before a college could be started.

It became apparent that at least a half-dozen additional counties had the enrollment potential to support community colleges. In the 1955-1956 academic year representatives of the State Department of Education contacted the Superintendents of Schools in counties which seemed to have this enrollment potential and arranged a series of meetings to investigate the possibility of establishing community colleges in their respective counties, utilizing existing facilities. Through the efforts of these Superintendents, their Boards of Education, and their staffs, eight additional community colleges were opened--four in 1957, two in 1958, and two in 1961.

The Superintendents of Schools and the local boards of education are to be commended for their foresight in establishing community colleges at a time when there was no shortage of space in colleges, when there was no clamor from parents to provide college facilities for their children. The local school officials had to convince the people of the need for community colleges. They had to win support from their respective taxing authorities. They had to educate their various citizen groups as to the nature of the proposed institutions.

Throughout the entire period when the counties were studying the feasibility of establishing community colleges, those who were promoting the idea were convinced of the fact that once a community would decide to establish a community college, it would never give it up. And the history of the movement in Maryland is proof of this contention.

Those who were promoting the establishment of community colleges, using high schools at night, knew that once the community colleges became established, the people would not only demand their continuance but also would support legislation to provide State-aid to build the colleges on their own campuses.

H. Enactment of Legislation in 1961

In 1961 the State enacted a legal structure for community colleges, increased its financial contribution for operating costs for community colleges, and for the first time provided financial assistance for the construction of separate campuses. Since that time, subsequent sessions of the legislature have increased the State's share for operating costs and have supported capital construction costs for community colleges. This support matched by local funds triggered an $80,000,000 building program for the construction of separate campuses for the community colleges.

Some of the colleges have already moved to their new campuses, some others are about to move, and still others are at various stages from mere purchase of site to the beginning of construction.

The striking effects of this activity are the rapid increases in full-time enrollment at the public community colleges--three times faster than the growth in other segments--and even of greater significance the rapid increase in the introduction of occupational curricula. In fact, the extent of this latter activity has forced the State Department of Education to adopt machinery for processing requests for approval of these curricula so as to prevent needless and costly duplication of programs in neighboring community colleges.

The extent of activity in the introduction of occupational curricula may be noted by comparing Table 4, which follows, with Table 3 and noting the growth from about a dozen programs in 1963 to 95 in 1967 with almost as many additional ones proposed for the future.

## Table 4

### PRESENT AND PROPOSED OCCUPATIONAL CURRICULAR OFFERINGS IN MARYLAND COMMUNITY COLLEGES APRIL 1967

| Curriculum | Allegany | Anne Arundel | Baltimore | Catonsville | Charles | Chesapeake | Essex | Frederick | Hagerstown | Harford | Montgomery | Prince George's | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Accounting | | | x | o | | | | | | | o | x | 4 |
| Accounting and Business | | | | | | | o o | | x | | | | 2 |
| Accredited Records Tech. | | | | | | | | | | | | | 1 |
| Architectural Tech. | | o | | | | | | | | | | | 1 |
| Art-Advertising | | | | | | | | | | | x | | 1 |
| Art-Commercial | | | x | | | | | | | | | | 1 |
| Audio-Visual Tech. | | x | | | | | | | | | | | 1 |
| *Automative Tech. | o | | | | | | | | | o | | | 2 |
| Banking | | | o | | | | | | | | | | 1 |
| Building Inspection | | | | o | | | | | | | | | 1 |
| Business | | | x | | | x | | x | | | x | x | 5 |
| Business & Industrial Mgt. | | | | | | | x | | | | | | 1 |
| Business Machines | | | | | | | | | | | | o | 1 |
| Chemical Tech. | x | | | x | | | | | | | o | | 3 |
| Child Care Assistant | | | | o | | | | | | | | | 1 |
| Civil Engineering Tech. | | | | o | | o | | | | x | o | | 4 |
| *Classroom Aide | | | x | | | | | | | | | | 1 |
| Construction Tech. | | | x | | | | | | | | | | 1 |
| Cosmetology | | | | | | | | | | o | | | 1 |
| Data Processing | | x | x | x | | o | | x | x | x | x | x | 9 |
| Day Care Assistant | | | | | | | | | | | | o | 1 |
| Dental Assistant | | | | o | | | | | | | x | o | 3 |
| Dental Hygiene | o | | | | | | | | | | | | 1 |
| Design and Drafting | | x | | | | | | | | | | | 1 |
| *Drafting Tech. | | | | | x | | | | | | | o | 2 |
| Drafting Tech. | | | | x | | | | | | | | | 1 |
| Electrical Tech. | | | | o | | | | | x | o | | | 3 |
| Electromechanical Tech. | | | | | | o | | | | | | | 1 |
| Electronic Tech. | | o | x | x | x | | | x | x | x | x | o | 9 |
| Engineering Aide | | | | | | | | | | | x | | 1 |
| **Engineering Technology | | | | | x | | | | | | | | 1 |
| Fire Science | | | | o | | | | | | | x | | 2 |
| Food Service Management | | | x | | | o | | | | o | | | 3 |
| Forestry | o | | | | | | | | | | | | 1 |
| Government Service | | x | x | | | | | | | | | | 2 |
| *Government Service Aide | | | x | | | | | | | | | | 1 |
| Graphic Arts | | | | o | | | | | | | o | | 2 |
| Health Tech. | | | | | | | | | | | | o | 1 |
| Heavy Equipment Operating | o | | | | | | | | | | | | 1 |
| Highway Tech. | | | o | | | | | | | | | | 1 |
| Hotel & Restaurant Mgt. | | | | o | | | | | | | | | 1 |
| Industrial Tech. | | | | | | | | | x | | | | 1 |

## Table 4 (continued)

| Curriculum | Allegany | Anne Arundel | Baltimore | Catonsville | Charles | Chesapeake | Essex | Frederick | Hagerstown | Harford | Montgomery | Prince George's | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Instrumentation Tech. | | | | | | | | | | | o | | 1 |
| Insurance | | | o | | | | | | | | | | 1 |
| Laboratory Tech. | | x | x | x | | o | | x | | o | | | 6 |
| Landscape Design | | | | | | | | | | | o | | 1 |
| Law Enforcement | | | x | o | | | x | | o | | x | o | 6 |
| Library Tech. | | | | x | | | | | | | | o | 2 |
| *Management Training | x | | | | x | | | | | | | | 2 |
| Maritime Tech. | | o | o | | o | o | | | | | | | 4 |
| Marketing & Advertising | | | | x | | | | | | | | | 1 |
| Mechanical Tech. | | | x | | | | | | | | | | 2 |
| Medical Record Tech. | | | x | | | | | | | | | | 1 |
| Mental Health Tech. | | | x | x | | | | | | | | | 2 |
| Nursing | o | x | x | x | | | o | x | | x | | x | 8 |
| Optometric Tech. | | | | o | | | | | | | | | 1 |
| Personnel Management | | | | | | | | | | | o | | 1 |
| Photography Tech. | | | | | | | | | | | o | | 1 |
| Physical Therapist | | | | | | | | | | | | o | 1 |
| Property Appraisal | | | | o | | | | | | | | | 1 |
| Pure Science Tech. | | | | | | | | | | | o | | 1 |
| Psychologist Assistant | | | | | | | o | | | | | | 1 |
| Quality Control Tech. | x | | | | | | | | | | | | 1 |
| Radiation Tech. | | | | o | | | | | | | x | | 2 |
| Radio/TV Programming | | | x | o | | | | | x | | o | | 4 |
| *Recreation Aide | | | x | | | | | | | | | | 1 |
| Recreation Leadership | | | x | | | | o | | | o | o | | 4 |
| Retailing | | | | | | | | | | | o | | 1 |
| Salesmanship | | | o | | | | | | | | | | 1 |
| *Secretarial | | | | | x | x | | x | | | | | 3 |
| Secretarial - Bilingual | | | | o | | | | | | | | | 1 |
| Secretarial - Business | | | x | | x | | | | x | | | x | 4 |
| Secretarial - Executive | o | | | x | x | x | o | x | | x | x | | 8 |
| Secretarial - Legal | o | | | x | | | | | | | | | 2 |
| Secretarial - Medical | o | | x | x | | | | | | | x | | 4 |
| Social Service Assistant | | | | | | | x | | | | | | 1 |
| *Stenographic | | | | | | | | x | | | | | 1 |
| Surveying Tech. | | | | | | | | | | o | | | 1 |
| Urban Development Assistant | | | x | | | | x | | | | | | 2 |
| X-Ray Tech. | | | x | | | | | | | | | | 1 |
| x - Present | 3 | 6 | 22 | 12 | 7 | 3 | 4 | 8 | 6 | 5 | 11 | 5 | 92 |
| o - Proposed | 8 | 3 | 6 | 15 | 1 | 6 | 6 | | 1 | 8 | 11 | 10 | 75 |
| Curricula - TOTAL | 11 | 9 | 28 | 27 | 8 | 9 | 10 | 8 | 7 | 13 | 22 | 15 | 167 |

x - Present State-Approved Curricula
o - Projected Curricula from current study by State Department of Education
52 Different Curricula offered at present
28 New Curricula Proposed
*Certificate Programs
**No Degree or Certificate

## I. Many Graduates of Occupational Curricula Decide to Continue Their Education by Transferring to Four-Year Colleges and Universities

It is not unusual to find college students changing their minds about their objectives in life. Students may enroll in a curriculum such as Urban Development Assistant with all intentions to terminate their college studies and accept full-time employment upon completion of the planned occupational program and upon receipt of the Associate degree. These same students, it has been observed, finding themselves successful with their college studies, frequently decide to continue their studies in a related or more advanced curriculum in a four-year college or university. Table 5 attests to this fact--83 students who graduated in occupational curricula decided later on to continue their education toward the baccalaureate degree. This may represent a small percentage (19%) but it becomes a very significant factor in curriculum planning. It is one of the reasons for the State Board of Education's standard that at least 24 semester hours of any Associate degree must be in Arts and Sciences; representing the Humanities, the Natural Sciences, and the Social Sciences. Courses in these areas are usually transferable.

Table 5

NUMBER AND PERCENT OF GRADUATES IN OCCUPATIONAL CURRICULA
WHO CONTINUED* EDUCATION IN FOUR-YEAR COLLEGES AND UNIVERSITIES

| College | 1959 | | 1960 | | 1961 | | 1962 | | 1963 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Allegany Community College | | | | | | | | | 0 | | 0 | |
| Anne Arundel Community College | | | | | | | | | 0 | | 0 | |
| Baltimore Junior College | 7/44 | 16 | 7/37 | 19 | 9/53 | 17 | 10/48 | 21 | 8/47 | 17 | 41/229 | 18 |
| Catonsville Community College | 0 | | 0 | | 1/1 | 100 | 1/1 | 100 | 0 | | 2/2 | 100 |
| Charles County Community College | | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Essex Community College | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Frederick Community College | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Hagerstown Junior College | 0/2 | | 0/1 | | 2/3 | 67 | 2/3 | 67 | 1/3 | 33 | 5/12 | 42 |
| Harford Junior College | 0 | | 0 | | 0 | | 1/1 | 100 | 0/2 | | 1/3 | 33 |
| Montgomery Junior College | 6/38 | 16 | 5/33 | 15 | 7/39 | 18 | 8/40 | 20 | 8/52 | 15 | 34/202 | 17 |
| Prince George's Community College | | | 0 | | 0 | | 0 | | 0 | | 0 | |
| TOTAL | 13/84 | 15 | 12/71 | 17 | 19/96 | 20 | 22/93 | 24 | 17/104 | 16 | 83/448 | 19 |

*Includes all who enrolled in four-year colleges or universities.

NOTE: Figures in denominators indicate numbers of graduates in occupational curricula at the community colleges.

J. Do Graduates Usually Stay in the Same Curricula When They Transfer to Four-Year Institutions?

According to Table 6, which follows, 37 percent of the graduates changed curricula when they enrolled in four-year colleges and universities. This figure should lend a great deal of support to our contention that the guidance and counseling staffs of the community colleges must be adequately supported. It is the student who changes curricula who most frequently loses credit in transfer and who loses most credit when there is a loss. This represents a loss both in time and in money for the students affected.

Loss of credit means not only an extra outlay of cash for additional courses but also, frequently, a delay of a year or more before the achievement of the bachelor's degree. This delay may cause a loss of thousands of dollars (first year's earnings) and a year or more of service credit toward retirement.

It is this factor of change of objective which makes it so very important that the community colleges keep their sights centered on the high schools from which the students come as well as on the colleges to which the students may transfer.

Table 6

NUMBER* AND PERCENTAGE OF GRADUATES WHO CHANGED CURRICULA
UPON ENROLLING IN FOUR-YEAR COLLEGES AND UNIVERSITIES

| College | 1959 | | 1960 | | 1961 | | 1962 | | 1963 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Allegany Community College | | | | | | | | | 4/4 | 100 | 4/4 | 100 |
| Anne Arundel Community College | | | | | | | | | 1/7 | 14 | 1/7 | 14 |
| Baltimore Junior College | 21/35 | 60 | 18/37 | 49 | 24/38 | 63 | 21/43 | 49 | 36/67 | 54 | 120/220 | 55 |
| Catonsville Community College | 1/1 | 100 | 0/2 | | 4/9 | 44 | 4/16 | 25 | 4/16 | 25 | 13/44 | 30 |
| Charles County Community College | | | 0/2 | | 1/13 | 8 | 1/7 | 14 | 2/9 | 22 | 4/31 | 13 |
| Essex Community College | | | 0/5 | | 5/10 | 50 | 1/9 | 11 | 4/17 | 24 | 10/41 | 24 |
| Frederick Community College | 2/6 | 33 | 2/3 | 67 | 2/4 | 50 | 0/2 | | 3/9 | 33 | 9/24 | 38 |
| Hagerstown Junior College | 4/18 | 22 | 7/35 | 20 | 9/31 | 29 | 6/29 | 21 | 12/39 | 31 | 38/152 | 25 |
| Harford Junior College | 1/4 | 25 | 1/8 | 13 | 2/5 | 40 | 2/5 | 40 | 1/7 | 14 | 7/29 | 24 |
| Montgomery Junior College | 10/24 | 42 | 12/39 | 31 | 22/51 | 43 | 23/67 | 34 | 25/74 | 34 | 92/255 | 36 |
| Prince George's Community College | | | 0/2 | | 1/6 | 17 | 6/10 | 60 | 4/11 | 36 | 11/29 | 38 |
| TOTAL | 39/88 | 44 | 40/153 | 30 | 70/167 | 42 | 64/188 | 34 | 96/260 | 37 | 309/836 | 37 |

*Figures in denominators indicate numbers who enrolled in four-year colleges or universities

K. How Many Graduates in the Transfer Curricula Actually Continued Their Education in a Four-Year College or University?

Although Table 7 indicates that a total of 933 (or 72 percent) of the 1296 graduates in transfer curricula entered the junior year in four-year colleges and universities, this figure is probably conservative since many of the remainder may have temporarily discontinued their formal education and may have decided to enroll later for their baccalaureate degrees.

L. In Terms of Achieving Bachelors Degrees, How Successful Were the Graduates of the Transfer Curricula Who Enrolled in Four-Year Colleges and Universities?

As of June, 1966, according to Table 8, sixty-one percent of this group had achieved their bachelors degrees. Again it must be kept in mind that additional ones may have received their degrees in June, 1967, and still others within the next few years.

Table 7

NUMBER* AND PERCENTAGE OF GRADUATES IN TRANSFER CURRICULA
WHO CONTINUED EDUCATION IN FOUR-YEAR COLLEGES OR UNIVERSITIES

| College | 1959 | | 1960 | | 1961 | | 1962 | | 1963 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Allegany Community College | | | | | | | | | 4/4 | 100 | 4/4 | 100 |
| Anne Arundel Community College | | | | | | | | | 9/12 | 75 | 9/12 | 75 |
| Baltimore Junior College | 29/45 | 64 | 34/50 | 68 | 39/69 | 57 | 45/72 | 63 | 70/134 | 52 | 217/370 | 59 |
| Catonsville Community College | 1/1 | 100 | 5/6 | 83 | 11/12 | 92 | 15/15 | 100 | 18/27 | 67 | 50/61 | 82 |
| Charles County Community College | | | 4/4 | 100 | 12/16 | 75 | 8/11 | 73 | 8/10 | 80 | 32/41 | 78 |
| Essex Community College | 0/2 | | 7/7 | 100 | 14/16 | 88 | 12/17 | 71 | 19/19 | 100 | 52/61 | 85.2 |
| Frederick Community College | 7/8 | 88 | 3/8 | 38 | 5/8 | 63 | 4/5 | 80 | 10/16 | 63 | 29/45 | 64 |
| Hagerstown Junior College | 19/23 | 83 | 36/45 | 80 | 30/38 | 79 | 30/49 | 61 | 39/52 | 75 | 154/207 | 74 |
| Harford Junior College | 4/4 | 100 | 9/9 | 100 | 5/7 | 71 | 8/10 | 80 | 10/14 | 71 | 36/44 | 82 |
| Montgomery Junior College | 30/43 | 70 | 46/61 | 75 | 66/76 | 87 | 77/89 | 87 | 92/117 | 79 | 311/386 | 81 |
| Prince George's Community College | | | 7/9 | 78 | 10/15 | 67 | 12/26 | 46 | 10/15 | 67 | 39/65 | 60 |
| TOTAL | 90/126 | 71 | 151/199 | 76 | 192/257 | 75 | 211/294 | 72 | 289/420 | 69 | 933/1296 | 72 |

*Figures in denominators indicate numbers of graduates in transfer curricula.

## Table 8

NUMBER* AND PERCENTAGE OF GRADUATES IN TRANSFER CURRICULA
CONTINUING IN FOUR-YEAR COLLEGES WHO WERE AWARDED BACCALAUREATE DEGREES

| College | 1959 | | 1960 | | 1961 | | 1962 | | 1963 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Allegany Community College | | | | | | | | | 2/4 | 50 | 2/4 | 50 |
| Anne Arundel Community College | | | | | | | | | 2/9 | 22 | 2/9 | 22 |
| Baltimore Junior College | 23/29 | 79 | 24/34 | 71 | 29/69 | 74 | 27/72 | 60 | 31/70 | 44 | 134/217 | 62 |
| Catonsville Community College | 1/1 | 100 | 2/5 | 40 | 6/11 | 55 | 9/15 | 60 | 11[b]/18 | 61 | 29/50 | 58 |
| Charles County Community College | | | 1/4 | 25 | 4/12 | 33 | 4/8 | 50 | 6/8 | 75 | 15/32 | 47 |
| Essex Community College | 0/0 | | 6/7 | 86 | 6/14 | 43 | 6/12 | 50 | 15/19 | 79 | 33/52 | 63 |
| Frederick Community College | 6/7 | 86 | 2/3 | 67 | 3/5 | 60 | 1/4 | 25 | 3/10 | 30 | 15/29 | 52 |
| Hagerstown Junior College | 17[a]/19 | 89 | 29/36 | 81 | 27/30 | 90 | 23/30 | 77 | 27/39 | 69 | 123/159 | 80 |
| Harford Junior College | 3/4 | 75 | 6/9 | 67 | 4/5 | 80 | 4/8 | 50 | 5/10 | 50 | 22/36 | 61 |
| Montgomery Junior College | 19/30 | 63 | 30/46 | 65 | 44/66 | 67 | 40/77 | 52 | 45/92 | 49 | 178/311 | 57 |
| Prince George's Community College | | | 5/7 | 71 | 3/10 | 30 | 3/12 | 25 | 3/10 | 30 | 14/39 | 36 |
| TOTAL | 69/90 | 77 | 105/151 | 70 | 126/192 | 66 | 117/211 | 55 | 150/289 | 52 | 567/933 | 61 |

a. one of these graduated with honors
b. one of these graduated with honors

*Figures in denominators indicate numbers of graduates in transfer curricula who enrolled in a four-year college or university.

M. What Changes Took Place in the Quality Point Averages of Graduates Who Transferred to Four-Year Colleges and Universities?

As might be expected there was a slight dip in the average of the quality point averages achieved in the first semester after transfer, compared with averages achieved during the overall period of attendance in the community college. Table 9 shows the extent of this drop for all transferees taken as a group.

Table 9

AVERAGE CHANGES IN QUALITY POINT AVERAGES AFTER ONE SEMESTER AT THE FOUR-YEAR INSTITUTIONS

| | |
|---|---|
| 1959..... | -0.28 |
| 1960..... | -0.37 |
| 1961..... | -0.26 |
| 1962..... | -0.17 |
| 1963..... | -0.31 |
| Total..... | -0.27 |

The number of cases studied in Table 9 was 330. It is evident that the student who achieves his Associate degree with a bare "C" average has a reasonably good chance that his average for the first semester at the four-year college or university will drop to the critical score of 1.73 on a 4.00 scale--a low score for a junior.

However, the administrators of the receiving college should understand that the factor of adjustment may be the principal cause of the drop in quality point scores of Associate degree people during their first semester on the four-year campuses. These students, in general, if given a chance will redeem themselves. This is brought out in Table 10 which shows the average changes in quality point averages for students comparing their quality point averages for the Associate degrees with those for the Bachelor's degrees. This study involved 553 cases.

Table 10

AVERAGE CHANGES IN QUALITY POINT AVERAGES BETWEEN ASSOCIATE AND BACHELORS DEGREES FOR CORRESPONDING GROUPS OF INDIVIDUALS

| | |
|---|---|
| 1959..... | -0.02 |
| 1960..... | -0.08 |
| 1961..... | +0.06 |
| 1962..... | +0.00 |
| 1963..... | +0.03 |
| Total..... | +0.01 |

Table 10 shows that three of the five graduating classes included in the study as well as the entire group taken as a whole came through in their upper-division studies (the junior and senior years of the four-year institutions) with quality point averages slightly above those they had attained in the community colleges. This record speaks well for the eleven public community colleges taken as a group.

It is interesting to note that of the 553 cases included in the above table, 180 graduated from the University of Maryland. Compared with the upper-division record of the group as a whole, however, the experience at the University of Maryland was disappointing in that the 180 had experienced a decrease of 0.16 in quality point averages at the University as compared with their records at the community colleges.

It was difficult to determine the reason for the apparently poorer record of those who completed their Bachelor's degrees at the University of Maryland as compared with those who graduated from other regionally accredited four-year colleges and universities. Those who achieved Bachelor's degrees from other regionally accredited institutions had shown an increase of 0.07 points in their quality point averages--and this involved 206 cases.

One explanation of the drop in quality point averages at the University of Maryland is the fact that most of the engineer transferees went to the University of Maryland. Of the entire group of twenty graduates of the public two-year colleges who later earned Bachelor's degrees in the field of engineering at the University of Maryland only two came through with an increase in quality point averages at the University as compared with their records for the Associate degree. The other 18 individuals experienced decreases of magnitude considerably out of porportion as compared with those who completed their studies in other fields.

N. Does a Graduate of a Regionally Accredited Community College Perform Better Academically in the Four-Year College Than His Counterpart Who Graduates From a Non-Regionally Accredited Community College?

Table 11, which follows, attempts to answer this question although some question may be raised about the reliability of the results since only two of the colleges were regionally accredited, and for one of those it applied for only the class of 1963. Montgomery Junior College was the one which was regionally accredited throughout the five-year period.

Referring to Table 11 it may be noted that for the first three years of the study the graduates of non-regionally accredited colleges seemed to fare slightly better in the upper-two years than their counterparts from the regionally accredited institutions. This situation was reversed, however, beginning with the 1962 graduates.

Although the overall difference between the two groups as a whole was a mere 0.02 quality points in favor of those who graduated from regionally accredited colleges and although this difference may be considered as insignificant, it speaks well for regional accreditation.

The Maryland State Department of Education has always encouraged new institutions to achieve regional as well as State accreditation. However, it has discouraged the community colleges from requesting the final stage of regional accreditation until they are in their own facilities.

Under this policy the following community colleges are now regionally accredited: Allegany, Baltimore, Catonsville, Essex, Harford, and Montgomery. Of the remaining five, Anne Arundel, Charles, and Hagerstown are Recognized Candidates for Regional Accreditation; while Frederick and Prince George's are Correspondents of Middle States. So, all of the public community colleges are either fully accredited by Middle States or are at some stage along the route to becoming regionally accredited. It might also be noted that the new regional community college--Chesapeake College--which will admit its first students in September, 1967, has already achieved the status of Recognized Candidate for Regional Accreditation.

Table 11

COMPARISON OF CHANGES IN QUALITY POINT AVERAGES BETWEEN ASSOCIATE AND BACHELORS DEGREES FOR GRADUATES OF REGIONALLY ACCREDITED COMMUNITY AND NON-REGIONALLY ACCREDITED COMMUNITY COLLEGES

| Year | | No. Cases | Change in QPA | Record Favors Graduates From |
|---|---|---|---|---|
| 1959 | Non-Regionally Accredited | 48 | -0.02 | Non-R |
| | Regionally Accredited | 18 | -0.04 | |
| 1960 | Non-Regionally Accredited | 72 | -0.04 | Non-R |
| | Regionally Accredited | 28 | -0.17 | |
| 1961 | Non-Regionally Accredited | 78 | +0.09 | Non-R |
| | Regionally Accredited | 43 | -0.01 | |
| 1962 | Non-Regionally Accredited | 73 | -0.01 | R |
| | Regionally Accredited | 39 | +0.02 | |
| 1963 | Non-Regionally Accredited | 71 | -0.01 | R |
| | Regionally Accredited | 81 | +0.07 | |
| Total | Non-Regionally Accredited | 243 | -0.00+ | R |
| | Regionally Accredited | 310 | +0.02 | |

## O. How Many Credits Do Graduates of Public Community Colleges Lose When They Transfer to Four-Year Colleges and Universities?

Table 12 presents the experience of 565 graduates over a five-year period and it reveals that the mean or average loss can be expected to be about 2.62 semester hours--or less than one three-semester hour course. (A companion study considering median loss instead of average loss revealed that more than half of the graduates from each institution lost absolutely no credits in transfer).

It is necessary to point out that the figures in Table 11 were based upon an actual review of both the records of the students at the community colleges and the transcripts of the same individuals as obtained from the colleges to which they transferred.

In determining loss of credit in transfer there were certain guidelines which were followed to insure consistency and to comply with accepted practices by registrars and admissions officers who evaluate transcripts. The following guidelines were followed in this study:

1. "D" and "F" grades and credit for orientation on the students' community college transcripts were judged ineligible for consideration as possible transfer credits.
2. Sixty-four credits were considered as the maximum number which would be acceptable by most colleges as applicable toward the Bachelor's degree.
3. When a student lost more than three eligible credits the case was not included if the student changed his objective when he entered the four-year institution. A specific example of this was a student who graduated in Arts and Sciences from a community college and transferred to the University of Maryland in the

field of Electrical Engineering. The fact that this student lost quite a few credits is no reflection on the quality of work at the community college.

Table 12

AVERAGE NUMBER OF CREDITS LOST IN TRANSFER BY GRADUATES OF PUBLIC COMMUNITY COLLEGES

| Year | Number of Cases | Average Number of Credits Lost |
|---|---|---|
| 1959 | 49 | 1.31 |
| 1960 | 92 | 2.73 |
| 1961 | 109 | 2.29 |
| 1962 | 123 | 2.66 |
| 1963 | 192 | 3.06 |
| Total | 565 | 2.62 |

This is a good record when one considers that only one of the eleven community colleges was regionally accredited during the five-year period. It is even more remarkable when one considers that ten years ago eight of the eleven had not yet admitted their first students. Furthermore, during the above five-year period seven of the eleven colleges were operating as evening programs in existing public high school facilities.

It is encouraging to note that in the 1967-1968 academic year all of these institutions will be offering full-time day programs in their own facilities.

P. Does A Graduate of a Regionally Accredited Community College Lose Fewer Credits in Transfer Than His Counterpart Who Graduates From A Non-Regionally Accredited Community College?

According to Table 13 students who graduated from non-regionally accredited community colleges in general lost fewer credits than those who graduated from regionally accredited community colleges. Graduates of the latter seemed to have the advantage in 1959 and 1961. In the

three other years, as well as for the overall total of the five-year period, those students who graduated from non-regionally accredited community colleges lost fewer credits than did their counterparts in the regionally accredited community colleges.

Lest the above analysis leads the reader to an unintentional downgrading of the value of regional accreditation, let it be stated that the author believes unequivocally in the desirability for an institution of higher education to seek regional accreditation at the earliest feasible time. The self-evaluation which a college faculty and administration undergo as a part of the process of regional accreditation provides one of the best stimuli for academic growth of the college. It is this process of self-evaluation which is so very important in the early stages of the development of any college or university. It is even more important than the subsequent visit to the campus of a team of evaluators appointed by the accrediting agency. Whether or not the college would subsequently be "accredited" by the accrediting association would be of secondary importance. The important and essential element of the accreditation process is the institutional self-evaluation; which process, incidentally, should be a continuing activity even though the institution does not have an immediate plan to seek regional accreditation.

Table 13

COMPARISON OF LOSS OF CREDIT IN TRANSFER BY GRADUATES OF REGIONALLY AND NON-REGIONALLY ACCREDITED COMMUNITY COLLEGES

| Year | | No. Cases | Average Loss of Credit | Record Favors Graduates From |
|---|---|---|---|---|
| 1959 | Non-Regionally Accredited | 38 | 1.34 | R |
| | Regionally Accredited | 11 | 1.18 | |
| 1960 | Non-Regionally Accredited | 66 | 2.55 | Non-R |
| | Regionally Accredited | 26 | 3.19 | |

Table 13 (continued)

| Year | | No. Cases | Average Loss of Credit | Record Favors Graduates From |
|---|---|---|---|---|
| 1961 | Non-Regionally Accredited | 68 | 2.41 | R |
| | Regionally Accredited | 41 | 2.09 | |
| 1962 | Non-Regionally Accredited | 82 | 2.55 | Non-R |
| | Regionally Accredited | 41 | 2.88 | |
| 1963 | Non-Regionally Accredited | 84 | 2.55 | Non-R |
| | Regionally Accredited | 108 | 3.46 | |
| Total | Non-Regionally Accredited | 257 | 2.23 | Non-R |
| | Regionally Accredited | 308 | 2.95 | |

Q. How Long Does it Take an Associate Degree Recipient to Earn a Baccalaureate Degree?

In this phase of the follow-up study records were obtained on 567 graduates who subsequently received baccalaureate degrees.

Of the 567 who earned bachelors degrees, 349, or 62 percent received these higher degrees within the usual two years; 159, or 28 percent, in three years; and the remaining 59 (10 percent) in more than three years.

Since the above sampling was not selective but involved every graduate for whom records could be obtained regarding their success in achieving bachelors degrees, it may be safe to conclude that better than 60 percent of Associate degree graduates earn their Bachelors degrees within the usual two-year period after they transfer.

R. When Students Transferred To Four-Year Colleges and Universities Did Most of Them Go To Colleges in the State of Maryland?

688 graduates out of the 933 who transferred to four-year colleges and universities chose to go to institutions in Maryland. This represents about 74 percent of the total distributed as follows:

| | |
|---|---|
| University of Maryland | 383 |
| Towson State College | 133 |
| University of Baltimore | 40 |
| Frostburg State College | 36 |
| McCoy College | 23 |
| Loyola College | 18 |
| Western Maryland College | 11 |
| Eleven other Maryland Colleges | 44 |
| Total | 688 |

Out-of-State institutions which attracted the greatest numbers of community college students were American University, Shepherd College, and Georgetown University. More than forty different colleges in about twenty different states from coast to coast are represented in the out-of-state institutions to which students transferred. Only five of this latter group were not regionally accredited.

S. What Has Been The Experience of Those Who Completed Occupational Curricula at the Community Colleges?

Earlier in this study it was noted that only 26 percent of the 1744 graduates over the five-year span had completed occupational curricula in the community colleges. Furthermore, of these 448 students, 83 or approximately 19 percent continued their studies toward the baccalaureate degree in four-year colleges and universities.

No attempt has been made in this study to follow-up the graduates of the occupational programs. An attempt is now being made, however, by this Department to collect information as to the nature of employment of this group following completion of the two-year degree program listed in Table 3 of this study.

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